

### **REMARKS**

The Office Action dated October 7, 2005, has been received and carefully noted. Reconsideration of this application is respectfully requested in view of the following remarks. No claims have been amended in this response. Thus, claims 5 and 13 are currently pending in the application and subject to examination.

Entry of this Response is proper under 37 C.F.R. §1.116 since this Response: (a) places the application in condition for allowance for reasons discussed herein; (b) does not raise any new issue regarding further search and/or consideration since the Response amplifies issues previously discussed throughout prosecution; (c) does not present any additional claims without canceling a corresponding number of finally-rejected claims; and (d) places the application in better form for appeal, should an appeal be necessary. Thus, Applicants respectfully request entry of this response.

### **Rejections under 35 U.S.C. § 103**

Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaburagi et al. (U.S. Patent No. 6,160,532, hereinafter "Kaburagi") in view of Takayama (U.S. Patent No. 6,317,157). Applicants respectfully traverse the rejection.

In order to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03. Applicants respectfully submit that Kaburagi and Takayama, either alone or in combination, do not teach or suggest all the elements of the claimed invention.

Claim 13 teaches at least the limitation of "the input-output characteristics of the digital gamma correction circuit are indicated by an exponential equation whose exponent

is variable.” The Office Action admits that Kaburagi fails to teach this claim limitation. The Office Action takes the position that Takayama cures the deficiencies of Kaburagi.

However, Takayama discloses the expression  $C' = c^{1/\gamma}$ , which is a gamma correction performed by the second gamma correction circuit, applied to a broadcast wave in order to keep the inverse gamma property counteracting the luminous property of the CRT (see Takayama, col. 2, lines 58-68).

The Office Action takes the position that the gamma correction taught in the form of an exponential equation disclosed in Takayama renders obvious the features of claim 13. The Office Action asserts that  $\gamma$  appears in the exponent, but in Takayama, it acts as a constant based on a property of the television signal that is the desired output, and related to analog color television broadcast standards (see Takayama, col. 8, lines 3-9, and col. 9, lines 32-36). Nowhere does the  $\gamma$  expression act as a variable as set forth in claim 13. The “variable” of claim 13 is expressed in the specification, for example, according to the equation “ $Y = 255 \times (X/255)^a$ ”, where the value of “a” can vary (see Specification, page 16, lines 10-25, and equation (1)).

Applicants therefore respectfully submit that neither Kaburagi nor Takayama, alone or in combination, teach or suggest all the elements of the claimed invention. There is no motivation in Kaburagi or Takayama to combine or modify the references in such a way that would teach all the elements of the claimed invention. As a result, the Office Action has failed to set forth a case of *prima facie* obviousness.

Additionally, to establish *prima facie* obviousness, there must be some motivation to combine reference teachings. M.P.E.P. § 2143. There are only three possible sources

for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. M.P.E.P. § 2143.01; see also In re Rouffet, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58. The presently claimed invention sets forth a digital gamma correction circuit varied according to a characteristic changing instruction from a user, where the input-output characteristics of the digital gamma correction circuit are indicated by an exponential equation whose exponent is variable.

The Office Action contends that one of ordinary skill in the art would know that a change in gamma correction corresponds to a change in the value of the gamma. However, even assuming the assertion is true, the Office Action's assertion would not solve the problem that is solved by the present invention. As has already been shown above, the exponential equation of Takayama does not have a variable exponent, and Kaburagi does not disclose any exponential equation at all. Further, neither of the references suggests teaching the features claimed in the present invention. Kaburagi has an objective to provide a digital gamma correction circuit capable of applying gamma correction to match the specific characteristics of individual liquid crystal display panels (see Kaburagi, col. 1, lines 52-56). The invention of Takayama aims to provide image conversion capable of coinciding the luminance variation ratio in the display unit of the television receiver with a variation ratio according to the linear operation applied from the computer (see Takayama, col. 3, lines 57-64). Neither Kaburagi nor Takayama teach or suggest such elements as "the input-output characteristics of the digital gamma correction circuit are varied according to a characteristic changing instruction from a user,

and the input-output characteristics of the digital gamma correction circuit are indicated by an exponential equation whose exponent is variable.” As such, Applicants submit that the Office Action has failed to show sufficient motivation to combine the references, and thus has not set forth a case of *prima facie* obviousness.

For the reasons listed above, Applicants submit that claim 13 is allowable over the cited prior art.

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaburagi and Takayama as applied to claim 13 above, and further in view of Admitted Art.

Claim 5, recites at least a “the input-output characteristics of the second digital gamma correction circuit are varied according to a characteristic changing instruction from a user, and the input-output characteristics of the second digital gamma correction circuit are indicated by an exponential equation whose exponent is variable.” There is no teaching or suggestion in the Admitted Art to modify or combine Kaburagi and Takayama to overcome the deficiencies noted above. For the same reasons as those listed above, Applicants submit that claim 5 is allowable over the cited prior art.

For all of the above reasons, it is respectfully submitted that the claims now pending patentably distinguish the present invention from the cited references. Accordingly, reconsideration and withdrawal of the outstanding rejections and an issuance of a Notice of Allowance are earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

In the event that this paper is not considered to be timely filed, an appropriate extension of time is requested. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account Number 01-2300, referencing Docket Number 107314-00025.

Respectfully submitted,



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